

REMARKS

Claims 1-7, 9-11, and 36-39

In the Office Action, claims 1-5, 9, and 10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sitnik U.S. Patent No. 6,160,570 in view of Alexander et al. U.S. Patent No. 6,177,931. Claim 6 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Sitnik, Alexander, and Hite et al. U.S. Patent No. 6,002,393 in view of Ivanyi U.S. Patent No. 6,286,140 and Herz et al. U.S. Patent No. 5,758,257. Claim 7 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Sitnik and Alexander in view of Ivanyi and Herz. Claim 11 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Sitnik and Alexander in view of Herz. These rejections are respectfully traversed.

Applicants' invention is related to an interactive television program guide system that presents demographically-targeted advertisements to a user based on demographic information about that user. For example, advertisements for a particular type of vehicle may be displayed only to those users who have an annual income over a certain amount.

Demographic targeting is accomplished using advertisements that have associated demographic category data (e.g., annual income data favoring a particular user income level). The system determines which advertisements to display for a given user by comparing the demographic category data with demographic information that is particular to that user.

Certain demographic information (e.g., a user's income) may be difficult or impossible to obtain by monitoring the user's regular interactions with the program guide. It may therefore be advantageous to use techniques such as surveys to gather demographic information. The use of surveys in gathering demographic information is described by applicants in their specification (see, e.g., page 18, lines 25-27 of applicants' specification).

Independent claims 1 and 5 have been amended to make it clear that applicants' approach involves gathering user demographic information for a given user by a survey. This approach is not shown or suggested by the prior art.

As described above, Sitnik describes a digital television system that displays one of two alternative images in a video sequence based on information stored in a

user profile. Sitnik does not collect demographic information on a user using a survey nor does Sitnik display demographically-targeted advertisements in an interactive television program guide.

Alexander describes an electronic program guide that uses viewer profile information to provide a customized presentation of advertising to a viewer. With Alexander's approach, viewer profile information is captured as the viewer interacts with the viewer's television, electronic program guide, and other sources of information (see column 29, lines 14-21 of Alexander). However, Alexander does not show or suggest the use of a survey, let alone a survey for gathering demographic information on a given user that is used in demographically targeting advertisements to that user.

Sitnik and Alexander therefore fail show or suggest applicants' claimed arrangement for displaying demographically-targeted advertising for a given program guide user based on demographic information for that user gathered using a survey. Claims 1 and 5 are therefore patentable over Sitnik and Alexander, whether taken alone or in combination. Claims 2-4, 6, 7, 9-11, and 36-39

depend from claims 1 and 5 and are patentable because claims 1 and 5 are patentable.

Claim 8

Claim 8 has been rewritten in independent form incorporating the limitations of originally-filed claim 5. In the Office Action, claim 8 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Sitnik and Alexander in view of Herz. This rejection is respectfully traversed.

In another aspect of applicants' invention, user demographic values may be determined from user input. This input may arise from user activities, such as watching or recording a television program, and may be indicative of demographic information about the user. For example, recording a sporting event may indicate that the user is a sports fan. In determining the user values, weight values that are indicative of the effect the user input has on the user values may be applied to the user input. For example, a user activity such as recording a program may be associated with a greater weight value than a user activity such as watching the program, because the former may

indicate a greater level of interest by the user (see, e.g., page 13, lines 9-30 of applicants' specification).

Amended claim 8 makes it clear that applicants' approach for determining user values for demographic categories using user input involves applying weight values to the user input. This approach is not shown in the prior art.

As stated in the Office Action, neither Sitnik nor Alexander show weight values. The Herz system uses weights to determine which programming to deliver to a user on a virtual television channel. However, the weights in Herz are not used to determine user values for demographic categories, let alone user values for demographically-targeted advertising.

These references therefore fail to show or suggest applicants' claimed use of weight values. Claim 8 is therefore patentable over Sitnik, Alexander, and Herz, whether taken alone or in combination.

Claim 40

Newly-added claim 40 incorporates the features of originally-filed claim 10 and its base claim. In the

Office Action, claim 10 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Sitnik in view of Alexander. This rejection is respectfully traversed.

With applicants' approach, user demographic values for targeted advertising may be determined from user input. The user input may arise from activities such as recording or watching a television program. When determining user values for demographic categories using the user input, it may be advantageous to provide a separate period for each demographic category. The period for each category may, for example, represent the minimum number of user inputs necessary before the user value for that particular category is deemed to be useful (see, e.g., page 14, lines 25-30 of applicants' specification). Claim 40 makes it clear that applicants' approach involves the use of a separate period for each demographic category. This feature is not shown by the prior art.

Alexander neither shows nor suggests periods for demographic categories. Sitnik's device may compile a user profile by monitoring programming displayed on the digital television receiver over a predetermined period of time (e.g. one month), but Sitnik's approach uses a single time

period. Accordingly, Sitnik does not allow a separate period to be assigned to each of multiple demographic categories. Claim 40 is therefore patentable over Sitnik and Alexander, whether taken alone or in combination.

Claim 41

Newly-added claim 41 incorporates the features of originally-filed claim 11 and its base claim. In the Office Action, originally-filed claim 11 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Sitnik and Alexander in view of Herz. This rejection is respectfully traversed.

With applicants' arrangement, user demographic information may be gathered based on user inputs such as activities related to recording or watching a television program. User values may be determined for demographic categories based on the user input. A decay function may be used during this process to refresh the values. The decay function may refresh the user values over a particular period of time or based on a specified number of user inputs. For example, the decay function may replace a stale user value with a default value, as described by

applicants in their specification at page 16, line 21 to page 17, line 11. This feature is not shown by the prior art.

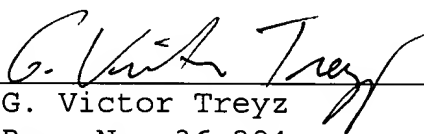
As stated in the Office Action, neither Sitnik nor Alexander shows or suggests a decay function. Herz describes adjusting a user profile based on the programming viewed by a user or based on a user's ratings in response to viewed programs (see column 14, lines 4-10 of Herz). However, Herz neither shows nor suggests that user values may be subjected to a decay function. Claim 41 is therefore patentable over Sitnik, Alexander, and Herz, whether taken alone or in combination.

Conclusion

The foregoing demonstrates that claims 1-11 and 36-41 are in condition for allowance. The remaining claims have been cancelled. This application is therefore

in condition for allowance. Reconsideration and allowance
of the application are respectfully requested.

Respectfully submitted,



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APPENDIX TO REPLY TO MAY 20, 2002 OFFICE ACTION

This appendix presents the amendments that have been made in bracket-and-underline format.

Claims 12-35 have been cancelled.

Claims 1 and 4-11 have been amended as follows:

1. (Amended) A system for demographically- targeting advertisements to a given user of an interactive television program guide, [which comprises] comprising:

user television equipment, including:

a receiver for receiving television program guide information and advertisements for [said] the interactive television program guide, [said] the advertisements having [preselected values for specified] associated demographic [categories] category data;

a user input receiver for receiving user input;

a microprocessor [which utilizes said user input received to determine user values for demographic categories]; and

memory for storing [said] user [values for the] demographic [categories; and said] information for the given user, wherein the user demographic information for the given user is gathered by a survey, wherein the user television equipment [comparing said preselected values for specified] is configured to compare the demographic [categories] category data associated with [said] the advertisements with [values of corresponding the user demographic [categories] information for the given user that is stored in [said] the memory to determine which advertisements should be displayed for the given user by [said] the interactive television program guide.

4. (Amended) The system of claim 1, wherein the comparison of [said preselected values] the demographic category data associated with the advertisements with [said values] the user demographic information stored in the memory is performed by [said] the microprocessor.

5. (Amended) A method for demographically-targeting advertisements to a given user of an interactive television program guide, [which comprises] comprising:

receiving advertisements for [said] the
interactive television program guide, [said] the
advertisements having [preselected values for specified]
associated demographic [categories] category data;

[receiving user input from user interface;
determining user values for demographic
categories utilizing said user input;] gathering user
demographic information for the given user using a survey;

storing [said] the user [values determined
for the] demographic [categories] information for the given
user;

comparing [said preselected values for
specified] the demographic [categories] category data
associated with [said] the advertisements with the stored
[values of corresponding] user demographic [categories]
information for the given user to determine which
advertisements should be displayed by [said] the
interactive television program guide for the given user;
and

displaying [the] demographically-targeted
advertisements [determined to be displayable] for the given

user in the interactive television program guide based
[upon] on the comparison.

6. (Twice amended) The method of claim 5,
further comprising:

storing information concerning television
channels necessary for determining [values for] the user
demographic [categories] information for the given user and
storing information concerning programs necessary for
determining [values for] the user demographic [categories]
information for the given user.

7. (Twice amended) The method of claim 5,
wherein determining [values for] the user demographic
[categories] information for the given user further
comprises providing for each television channel and program
having a bearing on at least one demographic category of
the user demographic information for the given user a
predetermined value indicative of how closely [a viewer of
said] the given user viewing the television channel or
[said] the program fits [said] the demographic category.

8. (Amended) A method for demographically- targeting advertisements to a given user of an interactive television program guide, [which comprises] comprising:

- receiving advertisements for [said] the interactive television program guide, [said] the advertisements having [preselected values for specified] associated demographic [categories] category data;
- receiving user input from user interface;
- determining user values for demographic categories utilizing said user input, wherein determining the user values for the demographic categories further comprises applying weight values to the user input that are indicative of the effect the user input has on the user values for the demographic categories;
- storing [said] the user values determined for the demographic categories;
- comparing [said preselected values for specified] the demographic [categories] category data associated with [said] the advertisements with the stored values of corresponding demographic categories for the given user to determine which advertisements should be

displayed by said interactive television program guide for the given user; and

displaying [the] demographically-targeted advertisements [determined to be displayable] for the given user in the interactive program guide based [upon] on the comparison.

9. (Amended) The method of claim 5, [which] wherein the user demographic information for the given user comprises demographic categories, and wherein the method further comprises providing default values for the demographic categories of the user demographic information for the given user.

10. (Amended) The method of claim 5, wherein determining the user [values for] demographic [categories] information further comprises providing a period for [each] the user demographic [category] information.

11. (Amended) The method of claim 5, which further comprises a decay procedure to refresh the user [values for the] demographic [categories] information.

comparing [said preselected values for specified] the demographic [categories] category data associated with [said] the advertisements with the stored user values of corresponding demographic categories for the given user to determine which advertisements should be displayed by said interactive television program guide for the given user; [and]

displaying [the] demographically-targeted advertisements [determined to be displayable] for the given user in the interactive program guide based [upon] on the comparison; and

using a decay function to refresh the user values for the demographic categories.